

REMARKS

In accordance with the foregoing, claims 57 and 64 are amended; thus, the pending claims 55-66 remain for reconsideration, which is respectfully requested.

No new matter has been added and accordingly, entry and approval of amended claims 57 and 64 are respectfully requested.

STATUS OF THE CLAIMS:

Claims 55-66 are pending.

Claims 55-56 are withdrawn from consideration.

Claims 57-66 are rejected.

ITEMS 2-3: REJECTION OF CLAIMS 57-66 UNDER 35 U.S.C. § 112, FIRST PARAGRAPH, AS ALLEGEDLY FAILING TO COMPLY WITH THE WRITTEN DESCRIPTION REQUIREMENT

This rejection is respectfully traversed.

The Office Action, in item 3, asserts:

The specification does not provide support for "carrying out the color display by making a first variance ratio of the coefficient differ from a second variance ratio of the coefficient, the first variance ratio of the coefficient being obtained at a gray level in a first primary color among the plurality of primary colors when the total number of sustain pulses is changed from the first pulse number to the second pulse number, and the second variance ratio of the coefficient being obtained at a gray level in a second primary color different from the first primary color when the total number of sustain pulses is changed from the first pulse number to the second pulse number: as is now claims in independent claims 57 and 64.

In accordance with the foregoing, claim 57 is amended for clarity, to recite, in part: "varying a gray level of a video signal input at a predetermined gray level by multiplying respective coefficients, when a total number of sustain pulses in a frame is a first pulse number and when the total number of sustain pulses is a second pulse number different from the first pulse number; and carrying out the color display by making a first variance ratio of the coefficient differ from a second variance ratio of the coefficient, the first variance ratio of the coefficient being obtained at a gray level in a first primary color among the plurality of primary colors when the total number of sustain pulses is changed from the first pulse number to the second pulse

number, and the second variance ratio of the coefficient being obtained at a gray level in a second primary color different from the first primary color when the total number of sustain pulses is changed from the first pulse number to the second pulse number."

Support for claim 57 can be found, for example, at page 21, line 13 to page 25, line 4 of the specification.

More specifically, support for the claimed "varying a gray level of a video signal input at a predetermined gray level by multiplying respective coefficients, when a total number of sustain pulses in a frame is a first pulse number and when the total number of sustain pulses is a second pulse number different from the first pulse number," as recited in amended claim 57 can be found, for example, on page 21, lines 13-18, which recites:

As shown in Figure 6, the white balance adjusting circuit of the first embodiment adjusts the white balance by adjusting the amplitudes of the input video signals R, G, and B by means of the multipliers 11 to 13 using the multiplication coefficients K_r , K_g , and K_b supplied from the microcomputer 2.

The feature is further supported, for example, by page 23, lines 24-30, which recites:

Figure 8 is a diagram for explaining the multiplication coefficients for the three primary colors, red, green, and blue, used in the white balance correction circuit of Figure 6. The multiplication coefficients K_r , K_g , and K_b for red, green, and blue are plotted by calculating them from the equation $K = 1/\alpha = N_m/(N + \alpha_0(N_m - N))$.

Figure 8 shows an exemplary relationship among luminance ratios of respective primary colors to the number of emissions, and a value of α_0 is different, depending on each of the primary colors. See, for example, Page 24, line 17 to page 25, line 4, which recites:

More specifically, assume for example that the luminances of green and blue at the maximum number of emissions are 200 cd/m^2 and 80 cd/m^2 , respectively, and the luminances at the minimum number of emissions are 60 cd/m^2 and 20 cd/m^2 , respectively.

At this time, the luminance ratio of blue to green at the maximum number of emissions is

$$\text{Blue : Green} = 80 : 200 = 1 : 2.5$$

Likewise, the luminance ratio of blue to green at the minimum number of emissions is

$$\text{Blue : Green} = 20 : 60 = 1 : 3$$

The luminance ratio of green to blue is therefore 1.2 ($3/2.5$); since this value is α_0 , the multiplication coefficient K as its reciprocal is

$$K = 1/\alpha_0 = 1/1.2 = 0.83$$

That is, the green video signal (G) is corrected by multiplying its signal amplitude by 0.83. The red video signal (R) is also corrected in like manner. In this way, by calculating the multiplication coefficients with various values of the number of emissions by using the previously given approximation equation, and by multiplying the video signals by the respective coefficients, correct white balance can be maintained regardless of the number of emissions.

Applicants respectfully submit that the claimed "carrying out the color display by making a first variance ratio of the coefficient differ from a second variance ratio of the coefficient, the first variance ratio of the coefficient being obtained at a gray level in a first primary color among the plurality of primary colors when the total number of sustain pulses is changed from the first pulse number to the second pulse number, and the second variance ratio of the coefficient being obtained at a gray level in a second primary color different from the first primary color when the total number of sustain pulses is changed from the first pulse number to the second pulse number," as recited in claim 57, is at least supported by page 24, line 17 to page 25, line 4 of the specification, as recited above.

Applicants respectfully submit that independent claim 64 is supported by the original specification for similar reasons.

Accordingly, withdrawal of the rejection of the specification and allowance of the application is respectfully requested.

CONCLUSION

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.

Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.


Serial No. 09/722,621

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: April 30, 2008

By: 
Matthew H. Polson
Registration No. 58,851

1201 New York Avenue, N.W., 7th Floor
Washington, D.C. 20005
Telephone: (202) 434-1500
Facsimile: (202) 434-1501